

1 GCCACGAGG CCCAGACTTT GACCGTCTTT CACCACCACT CCAGCCTCCT CTTGTGAAC TACTGACCAC CGAGAACAGA TTCCACTCTT TACCATTCTAG 100
 101 TCTACCAAG ATGCCCAATA CCAATGGAAG TATTGGCCAC AGTCACATTT CTCGTCTAGC CCAGTCTGTA ATGGAAGAGC TAAACACTGC ACCCGTCCAA 200
 201 GAGAGTCCAC CCTTGGCCAT GCCTCCTGGG AACTCACATG GTCTAGAAGT GGGCTCATTT GCTGAAGTTA AGGAGAACCC TCCTTTCTAT GGGGTAAATCC 300
 301 GTTGGATCGG TCAGCCACCA GGACTGAATG AAGTGTCTCG TGGACTGGAA CTGGAAGATG AGTGTGAGG CTGTACGGAT GGAACCTTCA GAGGCACTCG 400
 401 GTATTTTACC TGTGCCCCTGA AGAAGCGCT GTTTGTGAAA CTGAAGAGCT GCAGGCCCTGA CTCCTAGGTTT GCATCAATGC AGCCGGTTTC CAATCAAGAT 500
 501 TGAGCGCTGT AACTCTTTAG CATTTGGAGG CTACTTTAAGT GMACTAGT:G AAGAAAATAC T:CCA:CCAA AAATGGMAAA AGAARGCTTG GAGATAATGA 600
 601 TTGGGGAAAG AAGAAAGCA TCCAAAGGTC ATTACAATTC TTGKTACTTA G:ACTCAACC TTATCTKGC TTATTTKGT TTAGTTCTG TTCTNGGACA 700
 701 CTGGTGTAC TTAGACCCC AAGAAAGAG AAGCATGTT AGAATATTTT WKWGMMACCC AAGAGCTACT GAGGACAGAA ATTGTAAATC CTCCTGAGAA 800
 801 ATATGGATAT GTGTGTGCA CAAAATAT TAAACTGAGG AATAACTTG AAGAAGTGA GGTGTCATCA GGATTTACCT CTGAAGAAAA AGATCCTGAG 900
 901 GAATTCCTGA ATATTCCTGT TTATCATATT TTAAGGGTAG AACCTTTGCT AAAAAAAGA TCAGCAGGTC AAAAAAGTACA AGATTTCTTAC TTCTATCAAA 1000
 1001 TTTTATGGA AAAAAATCAG AAGTTGCGG TTCCCACAA TCAAGCATTT TTAGAATGTT CCTTCTCTGG AATTAGATAT AACAGATTTA CTGGAAGACA 1100
 1101 ATGTCTGATT ATTCAGATGC CTCGATTTGG AAAAGACTTT AACTATTTA ATGCTACGAC GATCCGGACA CCAGCTGGA AACAAAGCAG AATTGTCAG AGGCACCATC 1200
 1201 CCCCAGACAG TGCCGGATAT GTGGAGGCT TGCATGTAT GAGTGAAGA AACCCAGTGT CACTTCCCAA AGACTTACCC CGACTGGAG ATTGGAGACA 1300
 1301 CTTGCAACAC TCAGTCCAC CTTTATCCGA AGAGGCTGAA TCATAAATAT AACCAAGCCA CTATGTTGCT TTTGTGAAGT ATGGGAAGGA CGATTTCTGCC 1400
 1401 CGGCTGCATC CCTTGGCAGA ATATGGAGTT ATTGCTGTT CTCTGCATAG TCAACATTC CCCAAGTCMC CCMTGSCCC GAAGTAGGAG AGTACTTGGA 1500
 1501 TGCTCTTCT TTGGACAGA TGCCCGATCC GGGATGTTGG TCAGAAATGGC AAGCTGTGC ACGAAGACTG CTTGTGATG CCATATATGT GCCATGTACC 1600
 1601 AGATGTCTCC TGGAAAGACC TGSATTYCCT TGGACTCCA GGAGAAATCCC CAAAGAAACT GGAAGGCAGA GTCCCTAACG TTGCATCTTA TTCGGAGCTG 1700
 1701 CAGAGTCCAA CAATGAGTTT GTACAAATAA CTGGGGTCA TCGGGAAGG ATCCTTCAGA AAGGATGCC TCTGTTTTAA AACAAATGC TTTTGTCTCC 1800
 1801 GCAGTTCTGT TCAGGTCCA TTGCCGGCMA TGGATGTCTT TGTGGTATG TGGTTTTTTA AGAAGTCTAA ATGAAGTTTAT TAATACCTGA AGCTTTAAGT 1900
 1901 CTGAAGTATT TAATAAGAG CATTTTGCAC TCTAGAAAGT ATGTTTGTGT TGGTTTTTTA AGAAGTCTAA ATGAAGTTTAT TAATACCTGA AGCTTTAAGT 2000
 2001 TAAAGTCAAT GATCATAAGA TATTTTGGGA AGCATACAAT TTTAATTTGTG GAAATTTTAA GCCTCTTTTA GTCCATTGAG AATGTAATA ATGTGTCTT 2100
 2101 CTTTATGGAA AAAAAA 2116

FIG.1

1 GGGGTTTTCT TTACAC:TC T:CGGTACC G AACTCGGATC CACTAGTAA C GGGCCGCCAG TGTGCTGGAA ATTCCGGCACG AGGGTGTGGG GAGCCGGGGC 100
101 CGGCCCCGGGA CGCGGGCTGG CGAGCGGGCG CGCCCGGCCG CCGGAGTTTC CCCCTTTCTA GGGTGAGGAT GGTCTACAC AGCCACCCCG 200
201 AGTTCCCTTAG TTGAAGGTG CGCCCTGCTG TGACAGAAATG TGGTAATTGT AATCTTTAAC ATTTCATGT AAAACATATT TCCGTGATCAT CTTTCCATTG 300
301 TCTTCATGGA AATTGTATA ATATTGTGC CTTCAACTC TCGTCTGGT TGAATGACTT CATCTAATA CAACATGGAC ACCACGTTGC TGAATAACATG 400
401 CTTTGGGACT GCCACTGAAT TTAATCTTTG CCGTTTATG ACAAAGTTAT TAGTAGTTTC CCCTTTTIGA ATTAGTATTT TGAAGTTAAT ATCACAAATGA 500
501 GTTCAGGCTT ATGGAGCCAA GAAAAAGTCA CTTACCCCTA CTGGGAAGAG CCGATTTTTT ACTTGGCTCT TCAAGAAATGC AGCGTTACAG ACAAAACAAAC 600
601 ACAAAGCTC CTTAAAGTAC CGAAGGGAAG TATAGGACAG TATATTCAAG ATCGTTCTGT GGGGCATTCA AGGATTCCCT CTGCAAAAGG CAAGAAAAAT 700
701 CAGATTGGAT TAAAAATTCT AGAGCAACCT CATGCAGTTC TCTTTGTIGA TGAAG:GGAT GTTCTAGAGA TAAATGAAAA GTTCACAGAG TTAATTTTGG 800
801 CAATTACCAA TTGTGAGGAG AGGTTCAGCC TGTTTAAAAA CAGAAACAGA CTAAGTAAAG GCCTCCAAAT AGACCTGGGC TGTCTGTGA AGTACAGCT 900
901 GAGATCTGG GAAGAAAAAT TTCTTGGAGT TGTACGCTC AGAGGACCCC TGTTAGCAGA GAGGACAGTC TCCGGAATAT TCTTTGGAGT TGAATTGCTG 1000
1001 GAAGAAGGTC GTGGTCAAGG TTTCAGTGA C GGGGTGTACC AAGGGAACA GCTTTTICAG TGTGATGAAG ATTGTGGCTT GTTTGTGCA TTGGACAAGC 1100
1101 TAGAACTCAT AGAAGATGAT GACACTGCAT TGGAAAGTGA TTACGCAGGT CCTGGGGACA CAATGCAGGT CGAACTTCTT CCTTTGGAAA TAAACTCCAG 1200
1201 AGTTTCTTTG AAGGTGGAG AAACAATAGA ATCTGGAA CA GTTATATCT GTGATGTTT GCCAGGAAAA GAAAGCTTAG GATATTTTGT TGGTGTGGAC 1300
1301 ATGGATAACC CTATTGGCA CTGGGATGGA AGATTGTATG GAGTGCAC:CT TTGTAGTTTT GCGTGTGTG AAGTACAA TCTATTCAC ATCAATGATA 1400
1401 TCATCCCAGA GAGTGTGAC CAGGAAAGGA GGCTCCCA ACTTGGCTT ATGTCAAGAG GTGTGGGA CAAGGTICA TCCAGTCAATA ATAAACCAAA 1500
1501 GGCTACAGGA TCTACCTCAG ACCCTGGAAA TAGAAMCAGA TCTGAATTAT TTATACCTT AATGGGTCT TCTGTGACT CACAACCACA ATCCAAATCA 1600
1601 AAAAAATACAT GGTACATTGA TGAAGTTGCA GAAGACCTTG CAAAATCTCT TACAGAGATA TCTACAGACT TTGACCGTTC TTCAACCCA CTTCAAGCTC 1700
1701 CTCTGTGAA CTCACTGACC ACCGAGAAC GATTCCACTC TTTACCATTC AGTCTCACA AGATGCCCA TACCAATGGA AGTATTGGCC ACAGTCCACT 1800
1801 TTCTCTGTA GCCCAGTCTG TAATGGAAGA GCTAAACACT GCACCCGTCC AAGAGAGTCC ACCCTTGGCC ATGCCTCTG GGAACTCACA TGGTCTAGAA 1900
1901 GTGGGCTCAT TGGCTGAAGT TAAAGGAGAAC CCTCCTTTCT ATGGGGTAA T CCGTTGGATC GGTACGCCAC CAGGACTGAA TGAAGTGTCT GCTGGACTGG 2000
2001 AACTGGAAGA TGAGTGTGCA GGCTGTACGG ATGGAACCTT CAGAGGCACT CCGTATTTC CTTGTGCCCT GAAGAAGGCG CTGTTTGTGA AACTGAAGAG 2100
2101 CTGCAGGCTT GACTCTAGGT TTGCATCAT GCAGCCGGT TCCAAATCAGA TTGAGCGCTG TAACTCTTA GCATTGGAG GCTACTTAAG TGAAGTAGTA 2200
2201 GAAGAAATA CTCCACCAA AATGGAAAA GAAAGCTTGG AGATAATGAT TGGGAAGAA AAGGCATCC AGGGTCATTA CAATCTTGT TACTTAGACT 2300
2301 CAACCTTATT CTGCTTATT GCTTTTGTG TGTCTGGA CACTGTGTTA CTTAGACCCA AAGAAAAAG CAGTGTAGAA TATTATAGT AATCCCAAGA 2400

FIG. 2A

2401 GCTACTGAGG ACAGAAATTG TTAATCTCTT GAGAAATATATGGATATGTGT GTGCCACAAA AATTATGAAA CTGAGGAAAA TACTTGAAAA GGTCGAGGCT 2500
 2501 GCATCAGGAT TTACCTCTGA AGAAAAAGAT CCTGAGGAAT TCTTGAATAT TCTGTTTCAT CATATTTTAA GGGTAGAACC TTGCTAAAA ATAAAGATCAG 2600
 2601 CAGGTCAAAA GGTACAAGAT TGTACTTCT ATCAAAATTT TATGGAAAAA AATGAGAAAG TTGGCGTTCC CACAATTTCAG CAGTTGTTAG AATGGTCTTT 2700
 2701 TATCAACAGT AACCTGAAAT TTGCAGAGGC ACCATCATGT CTGATTATTC AGATGCCTCG ATTTGGAAAA GACTTTAAAC TATTTAAAAA AATTTTTCCT 2800
 2801 TCTCTGGAAT TAAATATAAC AGATTTACTT GAAAGACACTC CCAGACAGTG CCGGATATGT GGAGGGCTTG CAATGTATGA GTGTAGAGAA TGCTACGACG 2900
 2901 ATCCGGACAT CTCAGCTGGA AAATCAAGC AGTTTGTAA AACCTGCAAC ACTCAAGTCC ACCTTCATCC GAAGAGGCTG AATCATAAAT ATAACTCCAGT 3000
 3001 GTCACCTTCCC AAAGACTTAC CCGACTGGGA CTGGAGACAC GGCTGCATCC CTGGCCAGAA TATGGAGTTA TTGCTGTTC TCTGCATAGA AACAAAGCCAC 3100
 3101 TATGTTGCTT TTGTGAAGTA TGGGAAGGAC GATTCTGCCF GGCTCTTCTT TGACAGCATG GCCGATCGGG ATGGTGGTCA GAATGGCTTC AACATTCCTC 3200
 3201 AAGTCACCCC ATGCCACAGAA GTAGGAGAGT ACTTGAAGAT GTCTCTGGAA GACCTGCCAT CCTTGGACTC CAGGAGAATC CAAGGCTGTG CACGAAAGACT 3300
 3301 GCTTTGTGAT GCATATATGT GCATGTACCA GAGTCCAACA ATGAGTTTGT ACAATAAAT ACTGGCTCATCG GGAAAGGCCAA AGAAACTGAA GGCAGAGTCC 3400
 3401 TAACGTTTGA TCTTATTCGA GCTGGCAGTT CTGTTACAGT CCATTGCCGG CAATGGATGT CTTTGTGGTG ATGATCCCTC AGAAAAAGGAT GCTTCTGTTT 3500
 3501 AAAAACAAAAT TGTCTTTTGTG TCCCTGAAAT ATTTAATAAG AAGCAATTTG CACTCTAGAA AGTATGTTTG TGTGGTTTTT TTAAGAAGTC TAAATGAAGT 3600
 3601 TATTAAATACC TGAAGCTTTA AGTTAAGTGC ATTGAATCAT TGAATATTTT GGAAGGCATAC AATTTAAAT GTGGAAAGTTT AAAGCCCTCT TTAGTCCATT 3700
 3701 GAGAAATGTAA ATAAA 3715

FIG. 2B

8	MSS	GLWSQEKVTS	PYWEERIFYL	LLOECSVTDK	QTQKLLKVPK	GSIGQYIQDR	SVGHSRIPSA	KGKKNQIGLK	ILEQPHAVLF	VDEDVVFINE	100
101	KFTELLLAIT	NCEERFSIFK	NRNRLSKGLQ	IDVGCVPKVQ	LRSGEKEFYG	VVRFRGPLLA	ERTVSGIFFG	VELLEGRGO	GFTDGVYQCK	QLFOCDHDCG	200
201	FVALDKLEL	IEDDDTALES	DYAGPGDTMQ	VELPPLEINS	RVSLKGGETI	ESGTVIFCDV	LPGKESLGYF	VGVDMDNPIG	NWDGRFDGVL	CSFACVESTI	300
301	LLHINDIPE	SVTQERRPPK	LAFMSRGVGD	KGSSSIHKKPK	ATGSTSDPGN	RRSELFYTLN	GSSVDSQPQS	KSKNTWYIDE	VAEDPAKSLT	EISTDFDRSS	400
401	PPLQPPPVNS	LTENRFHSL	PFSLTCKMPT	NGSIGHSPLS	LSAQSVMEEL	NTAPVQESPP	LAMPPGNSHG	LEVGS�AEVK	ENPPFYGVIR	WIGQPPGLNE	500
501	VLAGELEDE	CAGCTDGTFR	GTRYFTCALK	KALFVKLKSC	RPDSRFASLQ	PVSNQIERCN	SLAFGGYLSE	VVEENTPPKM	EKEGLEIMIG	KKKGIQGHYN	600
601	SCYLDSTLFC	LFAFSSVLDT	VLLRPKEKND	VEYYSETQEL	LRTEIVNPLR	IYGYVCATKI	MKLRKILEKV	EAASGFTSEE	KDPEEFNIL	FHHILRVEPI	700
701	LKIRSAGQKV	QDCYFYQIFM	EKNEKVGVPY	IQOLLEWSFI	NSNLKFAEAP	SCLIIQMPRE	GKDFKLFKKI	FPSLELNITD	LLEDTPRQCR	ICGGLAMYEC	800
801	RECYDDPDIS	AGKJKQFCKT	CNTQVHLHPK	RLNHIKYNPV	LPKDLDPDWD	RHGCIPCQNM	ELFAVLCTET	SHYVAFVKYG	KDDSAWLFFD	SMADRDGGQN	900
901	GFNIPOVTTC	PEVGEYLKMS	LEDLHISLDSR	RIQGCARRLI	CDAYMCMYQS	PTMSLYK					957

FIG. 3